National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas

Olympic journey

JSC quality engineer reflects on his opportunity to judge Olympic games in Atlanta. Story on Page 3.

Mars bound

Two Mars spacecraft arrive at Kennedy Space Center to begin preparations for fall launch. Story on Page 4.

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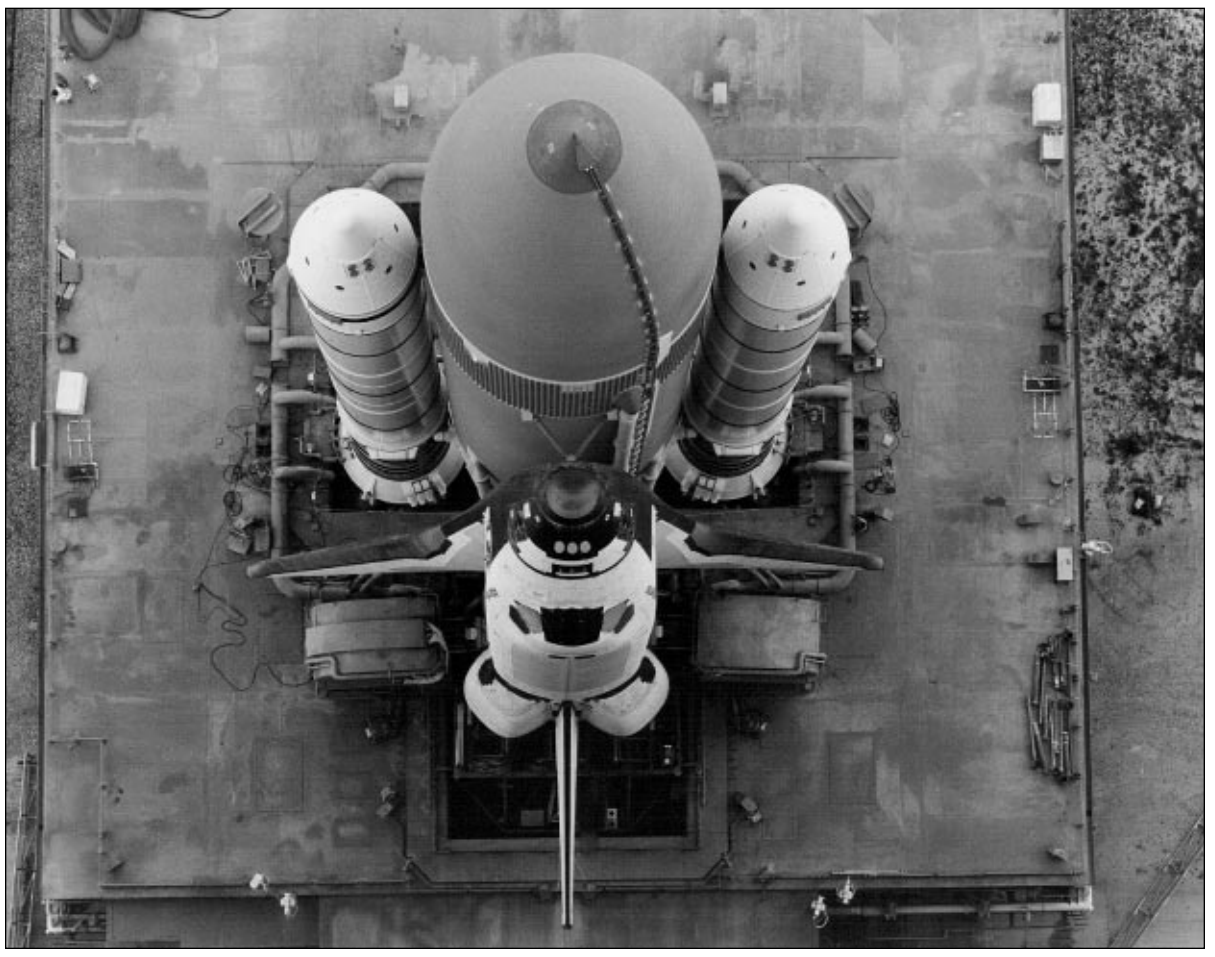

NASA Photo

***Atlantis* begins the journey back to Launch Pad 39A from the Vehicle Assembly Bldg. at Kennedy Space Center after receiving new solid rocket boosters. The STS-79 crew climbed aboard the orbiter this week for a dress rehearsal of the launch set for mid September.**

Atlantis launch rehearsal goes well

Shuttle managers keeping close eye on Hurricane Eduoard

A successful dress rehearsal for launch this week at Kennedy Space Center brought *Atlantis*' astronauts one step closer to liftoff next month on STS-79, the fourth shuttle-Mir docking mission to Russian's space station.

Commander Bill Readdy, Pilot Terry Wilcutt and Mission Specialists Jay Apt, Tom Akers, Carl Walz and John Blaha climbed aboard *Atlantis* on Wednesday for the final hours of a simulated countdown and engine firing, similar to what they will experience on a nine-day flight highlighted by the delivery of Blaha aboard Mir for the start of his four and a half month research flight.

Blaha will be replacing U.S. astronaut Shannon Lucid, who has now been in space 161 days, just eight days shy of breaking the all-time record for a single space flight by a woman. The record is currently held by Russian cosmonaut Elena Kondakova, who is now at the JSC training as a member of the STS-84 crew, which will be launched to Mir next May.

The countdown dress rehearsal took place as NASA managers gathered at KSC for the Flight Readiness Review for *Atlantis*' launch. NASA officials had been

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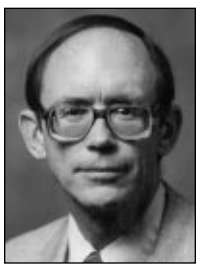
Harlan to head center focus

New ISO 9000 office to assist quality transition

JSC is establishing a new center-level organization—the ISO 9000 Project Office—to bring a top-level focus to the center's effort to become certified to the International Organization for Standardization 9000 family of standards.



Harlan

"The new ISO 9000 Project Office will be responsible for managing JSC's transition from our current NASA Quality Management System to the internationally recognized ISO 9000 standards," said JSC Director George Abbey. "This transition will include imposing ISO 9000 requirements on JSC contracts, as well as in-house JSC organizations. While JSC has already begun the process to register its current Quality Management System to the ISO 9000 standards, the new ISO 9000 Project Office will be responsible for managing the complex certification process, working with JSC organizations to ensure a smooth transition to ISO 9000 and evaluating the effectiveness of the implementation program."

Casper

Charlie Harlan has been selected to serve as acting director of the ISO 9000 Project Office. In this capacity, he will report directly to the JSC director. Most recently, Harlan served as director of the Safety, Reliability, and Quality Assurance Office.

"JSC has been a leader in NASA in the transition to ISO-9000," Harlan said. "We are now completing a significant pilot project with the Engineering Directorate which will form a template for the implementation of the ISO-9001 Quality Management System for the whole center. We are planning for third party certification in approximately one year, which is a challenging and aggressive schedule. This project will take a lot of hard work on the part of all center organizations, but the payoff to NASA will result in higher quality work, a reduction in nonconformances and reduced cost of doing business."

John Casper becomes acting director of Safety, Reliability, and Quality Assurance. In his new role, Casper will be responsible for managing and directing the institutional and programmatic safety, reliability and quality assurance programs for the center. Richard Dinkel will assist Casper as acting deputy director, and Gary Johnson will be assigned as acting deputy director for Russian Projects, SR&QA, pending Headquarters' approval.

Mir 21 crew prepares to say farewell to Lucid

The Mir 21 crew is wrapping up the remainder of its work in preparation for the trip back to Earth as the Mir 22 crew begins its program aboard the Russian space station.

Cosmonaut Researcher Shannon Lucid spent the week preparing for the end of her stay and arrival of *Atlantis* with her replacement—Astronaut John Blaha—packing up data and equipment for the return to Earth.

Included in the return experiments are some results from Lucid's latest experiment, the Greenhouse experiment. This week, Lucid harvested some of the dwarf wheat she had planted in early August as part of the experiment intended to look at how plants, which one day could play an important role in advanced life support systems on future spacecraft, grow in a weightless environment.

"I harvested a couple of the plants and put them in preservatives and they'll be ready to come back home," Lucid said. "When John gets here, then he will also harvest

the plants because they will continue growing and, hopefully, these wheat plants will be able to grow to the point where they will make seeds. So we'll start from a seed and go to a seed."

Periodically, Lucid has preserved sample plants for later study on Earth, although some plants may grow for as long as three months.

To prepare for experiments to be performed by Blaha, Lucid is conducting tests of the Biotechnology System in the Priroda module. The facility is reported to be in good condition and will be used for a variety of long-term experiments beginning with tissue culture growth in a Bioreactor during Blaha's stay on Mir.

Lucid said she and Mir 22 cosmonauts, Commander Valery Korzun and Flight Engineer Alexander Kaleri, are confident that they will work well together with Blaha for another successful Mir mission.

"I think Korzun and Kaleri are going to get along fine with John," Lucid said in an interview Monday. "John is a versatile person and he can get along with just about anybody, and Korzun and Kaleri can get along with just about anybody, so I think it will work out just fine."

"We lived with Blaha for some time together and we had the opportunity to work together quite a bit," Korzun said. "We know each other fairly well as colleagues, as friends, and I think that his presence on board Mir—the presence of an astronaut such as Blaha—will be very beneficial. We will work with him with great pleasure in fulfilling the program and I don't see any problems in our joint work."

Lucid said the most practical help she can give Blaha is to take a couple of hours to give him a guided tour of the station, showing him where everything is located. And her best advice: "just go with the flow."

Lucid admits that what she will miss most upon her return is working in the laboratory.

"I will miss not getting to work in a laboratory every day," Lucid said. "Its really been a lot of fun to more or less have my own laboratory that I was in charge of in making decisions, and just working in a lab everyday."

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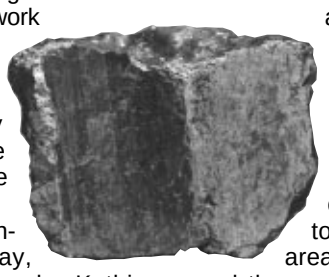
Was there ever life on Mars?

JSC meteorite researchers think they have the answer.

The JSC family will get a chance to see first-hand the work fellow employees are doing with Mars meteorites and hear about their discovery of evidence that the Red Planet was once home to primitive life.



JSC planetary scientists David McKay, Everett Gibson, and Kathie Thomas-Keprta of Lockheed-Martin will discuss their work, with fellow JSC employees in Teague auditorium at 2 p.m. Sept. 5. Following the 45-minute presentation there will be a 15-minute question and answer session.

Employees, off-site contractors, family and friends are invited to attend the briefing. Unbadged visitors will be allowed on-site and directed to designated parking areas when they tell the guard they are here for the "Mars briefing." Visitors are encouraged to use JSC gate 2 in front of Bldg. 1 off NASA Road 1.

JSC Photo by Robert Markowitz

From left, Kathie Thomas-Keprta of Lockheed-Martin, David McKay and Everett Gibson discuss findings of their recent research on the Mars meteorite using the scanning electron microscope.

JSC home page acquires new look

The world's Internet window on JSC is sporting a new set of draperies designed to help the center's external customers find what they're looking for quickly and easily.

The new JSC Web, or home page, remains at http://www.jsc.nasa.gov—the standard address established for each NASA center by the agency's Chief Information Office—but the site's organization has changed significantly. The new top-level links ask visitors who they are. Primary links go to sections for the public, children, educators, the

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